

BBRO Advisory Bulletin No 12 - W/C 18th July 2016

Whilst many crops continue to grow well with full and healthy canopies there remain, in some areas, some very backwards crops with poor canopies which continue to show signs of stress.

On lighter land, following the high temperatures this week, some backwards crops are now beginning to show drought stress and wilting. We continue to receive many samples from backwards crops at the BBRO plant clinic and have been out assessing more crops this week.

In the case of many backwards crops, the soil has 'slumped' following the intense rainfall in June and resulted in very tight soil conditions in which roots are struggling to develop and function properly. As the soil profiles dries out, plants are unable to extract sufficient water and nutrients and show deficiency symptoms such as manganese and magnesium. The initial yellowing and reddening of leaf margins due to water logging has declined in severity as crops recover but have left these crops with small canopies and has compromised yield potential. In some areas of fields these effects have been compounded by underlying soil compaction. Any areas effected by beet cyst or free living nematodes are now showing as patches within crops.



Attempts to revitalise crops with foliar nutrients and 'tonics' or using inter-row cultivation to break up the compacted surface soil profile have had mixed success. If there are no obvious foliar symptoms showing on plants it is less likely that there will be a benefit from any additional nutrients. However, keep a 'close eye open' for crops developing manganese deficiency as growth rates pick up, especially after rain. Plants can often struggle to gain sufficient nutrient to the rapidly growing parts of the plant and a foliar application may assist in these situations.



Manganese deficiency (left) and Magnesium deficiency (right)

The situation with leaf miner had stabilized across most areas, although on the 21st July numbers of eggs have risen sharply at our trial site in Cambridgeshire and reports of up to 29 eggs per leaf were found in several fields in the Newark factory area. Obviously adult mangold fly activity has been encouraged by the warm settled weather, so vigilance will be necessary over the coming days. Please remember the spray treatment thresholds for use of Biscaya as highlighted in previous BBRO bulletins and at www.bbro.co.uk/news.

Current Aphid and other insect activity remains low in crops, although signs of virus yellows infection from earlier aphid activity is now starting to show.



Foliar diseases

Rust has been found in more crops this week but only at low levels. We are seeing relatively low levels of other foliar diseases, but to date no reports of powdery mildew. Levels of rust have possibly been held in check by the hot temperatures. Apply a broad spectrum fungicide at full rate at disease onset and continue to monitor crops throughout the rest of July and August when a second treatment may be warranted, particularly if lifting from mid-October onwards.

Early rust symptoms

Downy mildew, especially in more susceptible varieties, is now being observed but are not currently at the levels seen in 2014 or 2015.

Early root rots

We have seen the first two cases of root rots in the plant clinic this week and these are being investigated further to determine the cause.

Weed beet & bolters

These are continuing to show in many crops and, in moist soils, they can be pulled easily with the root broken off and left on top of the canopy to wither. As time goes on, it will be important to check whether flowering has finished on the older flowers. Once it has, rogued plants will need to be removed from the field.

In some fields, there is still time to get a hoe through the last drilled beet. A-hoes will be best as there is more room for leaf canopy to flow through the hoe. You may need to remove row guards.

Weed wiping is another option worth considering.

Caution: this information is based on results of experiments and experience but cannot constitute a recommendation.

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